

ABSTRACT OF THE DISCLOSURE

5 Methods and apparatus for efficient management of memory and force output in a force
feedback system including a host computer and a force feedback device. A representation of
device memory is maintained on the host computer to allow the host computer knowledge and
control over storage and force effects in the device memory. A host cache for force effects is
provided to allow almost unlimited numbers of force effects to be created for the device, where
10 any force effects not able to fit in device memory are stored in the host cache. Other aspects of
the invention include a playlist stored on the device of force effects being played by the device,
and management of force output using relatively small, discrete time intervals.